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In Reply To:

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Montana State Office
5001 Southgate Drive, P.O. Box 36800
Billings, Montana 59107-6800
<http://www.mt.blm.gov/>



May 2002

Dear Participant:

It is my decision to approve the Loma/Vimy Ridge Watershed Environmental Assessment (EA) and Plan Amendment, allowing implementation of those actions outlined within the plan and EA. This EA amends the West HiLine Resource Management Plan (RMP).

An incorrect Map #4 was included in the final EA which was mailed to all participants. The correct Map #4 is included with this Finding of No Significant Impact and Decision Record (FONSI/DR). Minor changes were made to the Final EA to better clarify proposed actions and eliminate confusion.

This EA analyzed three alternatives for managing public lands (Alternative 1 was Current Management; Alternative 2 is the Selected Action; and Alternative 3 represents No Action). It also discussed management common to all alternatives and alternatives considered but dropped from further analysis.

This EA will become the framework for implementing public land management decisions contained in the West HiLine Resource Management Plan, the Upper Missouri National Wild And Scenic River Plan, the Wood River Ranch Habitat Management Plan, and the Standards for Rangeland Health and Guidelines for Livestock Grazing Management. The selected action will maintain healthy rangelands and riparian vegetation, while providing high quality wildlife habitat and recreational opportunities.

I appreciate very much your participation in this process and urge you to stay involved with public land issues. For additional information, please contact Jody Peters, Havre Field Station, at 406-262-2832.

Sincerely,

Sherry A. Barnett
Acting State Director, Montana/Dakotas
Billings, Montana

May 15, 2002

Date

**LOMA/VIMY RIDGE WATERSHED
ENVIRONMENTAL ASSESSMENT AND PLAN AMENDMENT
TO THE
WEST HILINE RESOURCE MANAGEMENT PLAN**

FINDING OF NO SIGNIFICANT IMPACT/ DECISION RECORD

A Plan Amendment and Environmental Assessment (EA) has been completed that discusses alternatives and selects a preferred alternative which would implement travel planning, re-issuance of grazing permits, and recreation management on public land near Loma, Montana, administered by the BLM, Lewistown Field Office (LFO), Havre Field Station (HFS). The EA (EA # MT064-01-15) is available for review at the HFS BLM Office, Havre, MT.

DECISION:

The information and analysis included in the Plan Amendment/EA are the basis for my decision to approve Alternative 2 as outlined in the EA and amend the West HiLine Resource Management Plan, approved in 1988, for off-highway vehicle (OHV) designations. This alternative will authorize (as per 43 CFR 4180 & 4160) re-issuance of grazing permits for all allotments, upgrading of roads for protection of resources and public safety, signing of public land access routes and boundaries, and will implement a travel plan for all BLM lands and public roads within the planning area. This alternative will improve safety for the public users in an area of increasing public use, and will protect those public lands while continuing to provide for other permitted uses. The Loma/Vimy Ridge Watershed Plan Amendment/EA was prepared under the regulations for implementing the Federal Land Policy and Management Act (FLPMA) of 1976 and the National Environmental Policy Act (NEPA) of 1969.

FINDING OF NO SIGNIFICANT IMPACT:

Based on the analysis of potential environmental impacts contained in the environmental assessment and the mitigation identified, I have selected Alternative 2 and determined that implementation of this alternative is not a major federal action which will significantly affect the quality of the human environment. Therefore, I have determined that an Environmental Impact Statement is not required.

RATIONALE FOR DECISION:

The decision to select Alternative 2 as outlined in the EA satisfies the Bureau's concerns, objectives, and obligations, has been determined to be in the public interest, and does not result in any undue or unnecessary environmental degradation. The identified mitigation will minimize remaining impacts by placing signs on all BLM access routes and boundaries, minimizing disturbance of new areas, limiting construction wherever possible to already disturbed areas and non-native vegetation, aggressively control noxious weeds on all public lands, and requiring site-specific environmental analysis on all new construction. This decision will amend the West HiLine Resource Management Plan for OHV

designations and is consistent with the Upper Missouri National Wild and Scenic River Plan, the Wood River Ranch Habitat Management Plan (HMP), Lewis and Clark National Historic Plan, Standards for Rangeland Health and Guidelines for Livestock Grazing Management Environmental Impact Statement, and the State Director's Interim Guidance for managing the Upper Missouri River Breaks National Monument.

The decision to implement this plan is authorized upon signature of this FONSI/DR. The alternative incorporates all practical means to avoid or minimize environmental damage or harm. Site-specific environmental analysis will be used to insure that all proposed actions minimize environmental damage and conform with the State Director's Interim Guidance for managing the Upper Missouri River Breaks National Monument, for those lands within the boundary. Additional actions or recognized needs within the monument will be addressed in the RMP for the Upper Missouri River Breaks National Monument.

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Sherry A. Barnett
Acting State Director, Montana/Dakotas
Billings, Montana

May 15, 2002

Date

SUMMARY OF THE APPROVED LOMA/VIMY RIDGE WATERSHED PLAN

ISSUES:

The issues raised during scoping for this planning document were recreation, access, wildlife, and land use (priorities and conflicts).

ALTERNATIVE 2:

This alternative would maintain healthy rangelands, riparian vegetation, provide high quality wildlife habitat, and provide high quality recreational opportunities.

1. Recreation

This alternative will provide recreational opportunities and infrastructure to safely meet existing needs, while minimizing disturbance to riparian vegetation, wildlife habitat, noxious weeds, and the values which make this area important and unique.

Undeveloped use areas will remain open to public use for all dispersed recreation uses which do not permanently degrade or damage the public lands and natural resources. These uses include but are not limited to hunting, fishing, hiking, picnicking, dispersed camping, and wildlife viewing.

The boat launching ramp will be maintained at the current location. The vehicle parking area will be maintained with gravel or allowed to vegetate to grass. The parking area will have a new pole or post and pole fence with walk throughs to replace the existing fence, at the same location, and will protect riparian resources from vehicle traffic. Two to three cooking-warming units will be provided in the future. The cooking-warming units or any other recreational upgrades will be analyzed with site-specific environmental analysis for direct impacts to wildlife, riparian vegetation, noxious weeds, and other resources. The vault toilet will be maintained at the current location.

The existing access road to the boat ramp will be upgraded as determined by BLM road safety standards. Turnouts may be provided to facilitate two-way travel. This improvement will upgrade and partially reroute the road, and provide all-weather access to an existing BLM boat launching ramp, parking and camping area. This road route will be determined by a future route analysis. A site-specific environmental analysis will be completed using this route, the required size specifications and detailing specific impacts from this upgrade.

The road to the Marias River fishing access site will be upgraded to facilitate all-weather travel, to a level determined by BLM safety standards. Turnouts may be provided to facilitate two-way travel. This improvement will upgrade an existing road and provide all-weather access to a major

public fishing access site at the mouth of the Marias River. A site-specific environmental analysis will be completed using this route, the required size specifications and detailing specific impacts from this upgrade.

The cultural resources throughout the area will provide opportunities for interpretation and public education. The current developments at Decision Point include a self-guided walking path with interpretive signs for visitor information. This site will be upgraded to include better gravel, resting benches along the trail or at stops, picnic tables, an information kiosk for the Lewis & Clark National Historic Trail, and shelters at the parking area. These improvements will provide visitor safety and resource protection for public visitors to the site.

Signs will be placed directing people from the highway to developed sites or points of interest; Decision Point, Lewis & Clark National Historic Trail, Upper Missouri River Breaks National Monument, boat launch, fishing access, and the Richard E. Wood Watchable Wildlife Area.

2. Off-Highway Vehicles (OHVs)

Travel by motorized vehicles will be restricted to designated routes year long, shown on **Map 4** included with this document. No new road closures are proposed in this plan in addition to the emergency closures which have been in effect for 10 years. Unless specifically prohibited, off-road travel for administration of a federal lease or permit will be allowed.

Signs will be placed to direct the public to established routes. Parking areas will be located on Vimy Ridge to provide hunters with walk-in access to large public land tracts.

Resource damage, changes in landscape and user conflicts will be considered in opening or closing roads and trails in the future. As additional mapping and signing occurs, the roads and trails designated as open or restricted may change depending on future management needs.

3. Access

The BLM will strive to improve access to public lands on Vimy Ridge through easements and cooperative management with private landowners. When possible, the BLM will acquire, through willing sellers, legal access along the Missouri River and lands contiguous with the Loma/Vimy Ridge public lands.

4. Wildlife

Wildlife habitat improvements will continue as planned under the Wood River Ranch HMP. These actions include water developments, vegetation manipulations to benefit wildlife (seeding, planting, mowing, burning and grazing), and nesting structures. As per the State Director's Interim Guidance, vegetation manipulation projects will be reviewed on a case-by-case basis.

Actions are such that the values which make this an important wildlife management area and public hunting destination will continue as before.

Management and improvement of wildlife habitat in the Vimy Ridge area will receive no emphasis beyond that allowed in previous planning documents and to meet standards of rangeland health.

5. Livestock Grazing Management

Under this alternative, Standards of Rangeland Health will continue to be achieved and guidelines will be met through a variety of grazing management techniques. Ten-year permits will be issued on all allotments except for the Wood River Ranch, #6431. This allotment is not currently authorized for grazing and will only be done so in the future to meet the needs of the vegetation and to improve wildlife habitat.

6. Farming

Farming will continue on the 600 acres of public land currently under cultivation (**Map 2** of EA) as planned under the Wood River Ranch HMP. Agricultural agreements to manage for wildlife forage or cover will be continued with willing conservation groups.

ALTERNATIVES:

Two other alternatives were considered:

- Alternative 1 - Current Management with re-authorization of grazing permits based on meeting Standards of Rangeland Health. This alternative would not implement travel planning and restrictions, or upgrade recreational improvements, access, and signing. This alternative does not meet BLM requirements to provide travel planning, provide for resolution of conflicts between public land users, provide for recreational use of these lands while minimizing impacts to the environment and wildlife habitat.
- Alternative 3 - This is the No Action Alternative and would not authorize renewal of ten year grazing permits. All other actions would be the same as the preferred alternative. This alternative does not meet BLM objectives to provide for diverse multiple use of the public lands where conflicts with other resources or impacts to the environment are not an issue. Unless specifically designated otherwise, grazing is an acceptable use of public lands where those lands are meeting the Standards of Rangeland Health or grazing is not the cause for not meeting those standards.

IMPLEMENTING AND MONITORING DECISIONS:

The Loma/Vimy Ridge Watershed Plan provides the framework for managing the many resources found on public lands in the area. Monitoring will provide the information needed to chart the progress being made toward reaching the plan's stated goals and objectives.

MAINTAINING AND AMENDING DECISIONS:

Decisions in this plan will be maintained to reflect minor changes in information. Maintenance is limited to refining or further clarifying a plan decision and cannot expand the scope of the decision nor change the terms and conditions of the decisions. Maintenance will be documented in supporting records. A plan amendment may become necessary if major changes are needed or to consider a proposal or action that is not in conformance with the plan. Plan amendments are accomplished with public input and environmental analysis.

PUBLIC INVOLVEMENT:

The views and concerns of the public were actively solicited throughout this planning process. Public involvement and coordination is summarized in Chapter 5 and Appendix A of the Plan Amendment/EA.

CONSISTENCY:

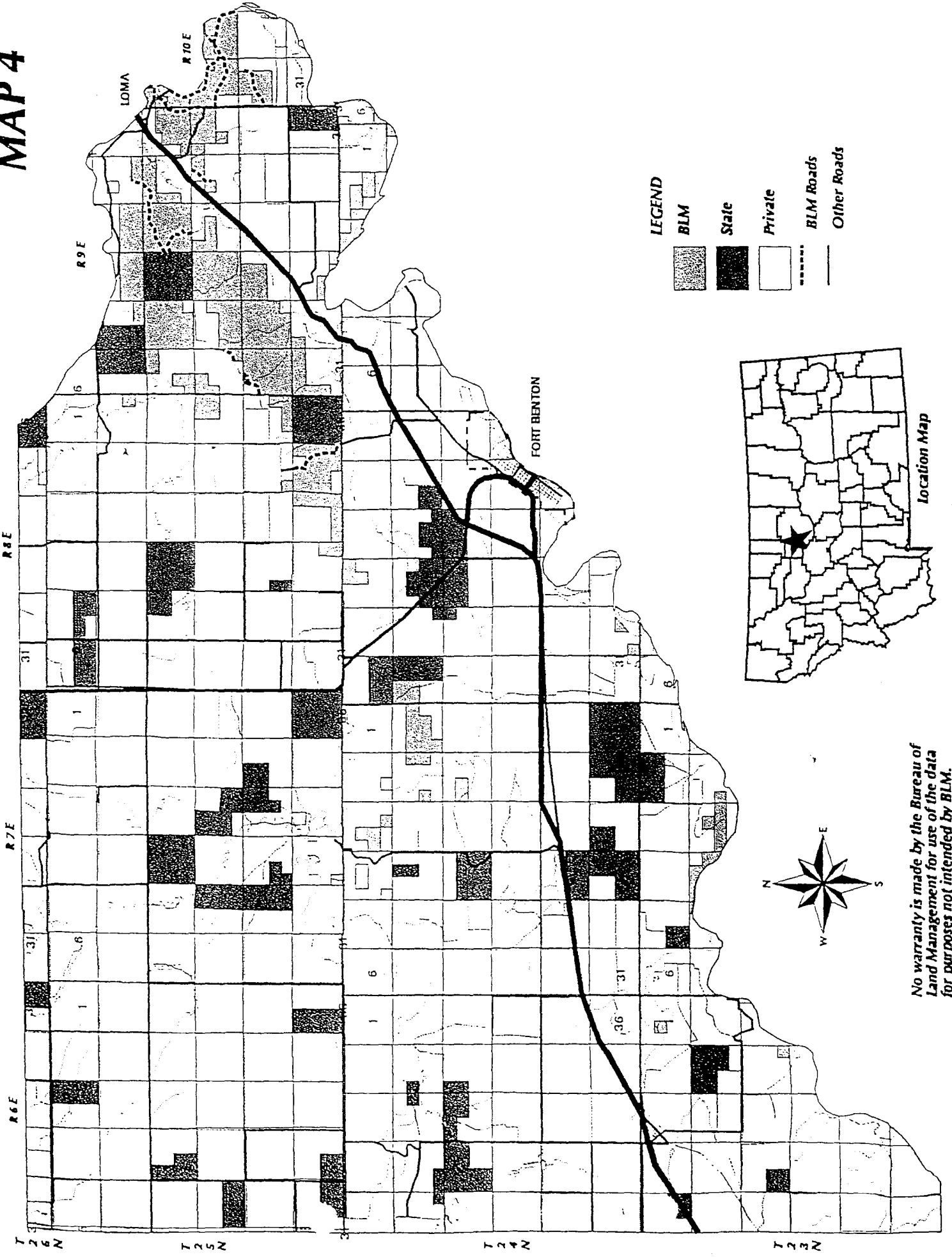
This plan is consistent with the plans, programs, and policies of other Federal, state and local governmental agencies.

PUBLIC AVAILABILITY OF THIS DOCUMENT:






Copies of the Decision Record are available from the Havre Field Station, 1705 Second Street West, P.O. Box 911, Havre, MT 59501-0911.

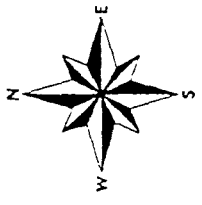
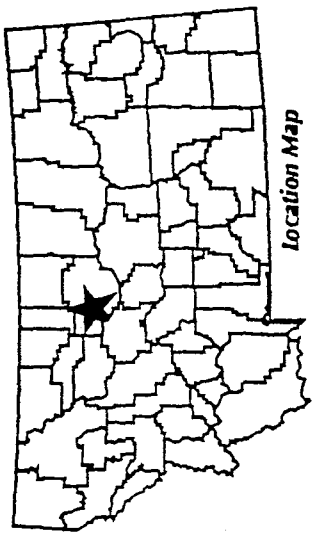
LOUISIANA WATERWAYS AUTHORITY - KANSAS FOR KANSAS PLAN

MAP 4



LEGEND

	BLM
	State
	Private
	BLM Roads
	Other Roads



No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by BLM.

Loma/Vimy Ridge Watershed

Environmental Assessment & Plan Amendment
MT064-01-15

Bureau of Land Management
Havre Field Station
Havre, Montana

September 2001

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Chapter I. PURPOSE AND NEED

A. INTRODUCTION

In October of 1997, the Bureau of Land Management (BLM) initiated the Loma/Vimy Ridge Watershed planning effort which would implement the decisions of the West Hiline Resource Management Plan (RMP) and Environmental Impact Statement (EIS) (BLM 1988), the Upper Missouri National Wild and Scenic River Plan (BLM 1993), the Wood River Ranch Habitat Management Plan (HMP) (BLM 1992), and the Standards for Rangeland Health and Guidelines for Livestock Grazing Management EIS (BLM 1997). Based on the written and oral comments received from the public, and other federal and state agencies, the BLM has prepared this watershed plan and environmental assessment(EA) which provides a framework for public lands administered by the BLM in the Loma/Vimy Ridge area.

Implementation is directed toward maintaining high quality recreational opportunities without dramatically altering wildlife habitat or impacting permitted agricultural use, when that use is meeting vegetative or wildlife habitat objectives, and providing opportunities for interpretation of cultural and historic resources and improving public access.

B. LOCATION

The Loma/Vimy Ridge Watershed, covering about 13,053 acres, consists of two large blocks of public land located on or adjacent to Rowe Bench and Vimy Ridge, in Chouteau County. These lands are the high grounds between the Missouri, Teton, and Marias Rivers, where they converge. The land is in north central Montana about ½ mile west of Loma and 11 miles northeast of Fort Benton. Surface ownership consists of approximately 11,453 acres of public land and 1,600 acres of state land. Private and state lands will not be addressed in this plan. The public lands are administered by the BLM through the Havre Field Station. Refer to **Map 1** at the end of this chapter for the location of the watershed and surface ownership.

Approximately 2,655 acres of the watershed is within the Upper Missouri River Breaks National Monument, including Rowe Bench, Decision Point, bluffs overlooking the Missouri River and adjacent river bottoms. These public lands are located adjacent to the Upper Missouri National Wild and Scenic River (**Map 1**).

C. CONFORMANCE WITH LAND USE PLANS

The West Hiline RMP sets forth the land use decisions and conditions guiding management of public lands and minerals within the Loma/Vimy Ridge Watershed. All uses and activities within the watershed must conform with the decisions, terms and conditions described in that plan. Other plans which set forth management guidelines specific to this watershed or activities within it include the Upper Missouri National Wild and Scenic River Plan, the Wood River Ranch HMP, Lewis and Clark National Historic Plan, and the Standards for Rangeland Health and

Guidelines for Livestock Grazing Management EIS.

The Loma/Vimy Ridge Watershed Plan would amend the West Hilene RMP and designate all public lands within the Loma/Vimy Ridge area as limited to designated roads and trails. A map showing the transportation network of roads and trails available for use under the terms and conditions set forth in this plan is located at the end of Chapter 2.

Management of public lands within the Upper Missouri River Breaks National Monument will be consistent with the Montana State Directors' Interim Guidance for managing the Upper Missouri River Breaks National Monument (BLM 2001a).

D. ISSUES

As a result of the public interest in the management of the Loma/Vimy Ridge Watershed, public meetings and briefings were held to identify the resource issues to develop proposed actions and alternatives. Working groups of interested public assisted the BLM with identifying issues and working through various alternatives for these public lands. The working groups formed for this planning effort consisted of grazing and farming lessees, sportsman, conservation organizations, BLM, Chouteau County planners, and the Natural Resources Conservation Service (NRCS). Appendix A lists the recommendations provided by the working groups.

The following resource issues were of greatest concern. These were initially identified during scoping, and in addition, from written and oral comments received during public meetings.

1. Recreation

Current levels of recreation use are high; mainly involving river users (floaters, hunters, fishermen, and outfitters), and upland hunters (grouse, partridge, pheasant, waterfowl, deer, and furbearers). In addition wildlife viewing, camping, picnicking, hiking, and mountain biking occur on these public lands during the year. Some groups and individuals have recommended BLM provide more public interpretation of important cultural resources and historic events.

Concern was expressed about the level of recreational development which could occur along the Upper Missouri National Wild and Scenic River. Primary concern was impacts to other resources.

2. Access

Public lands in the Vimy Ridge area of the watershed have limited public access. Access to these lands are through state school trust lands or private property with permission from landowners.

3. Wildlife

There is concern among public users of the watershed area that actions by the BLM will

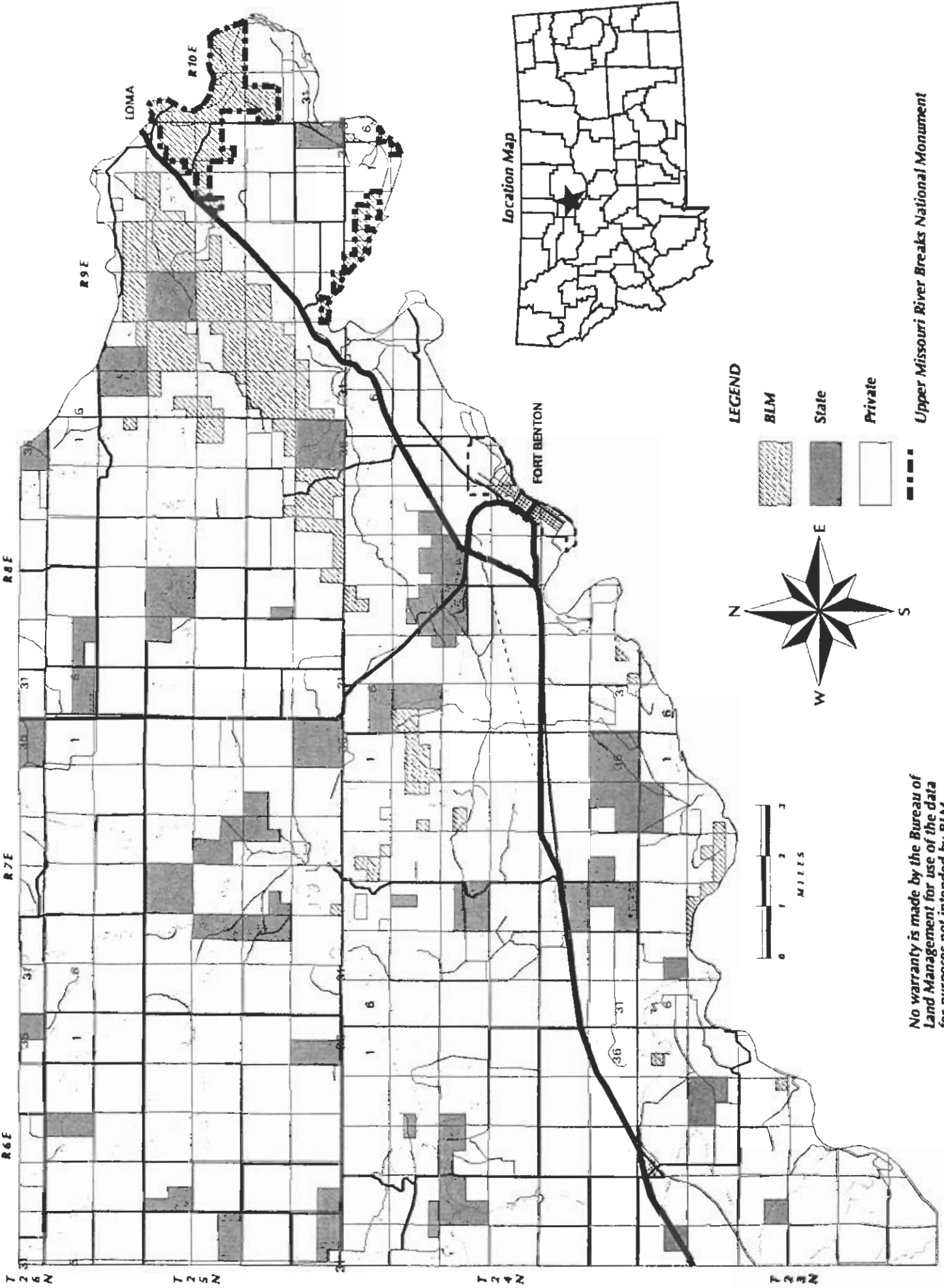
negatively affect high quality wildlife habitat and wildlife use of the area.

4. Land Use (Grazing, Farming, Recreation)

Landowners, public land users and others interested in the area have expressed a concern about future land uses and the impacts to current uses. The BLM has been asked to determine how compatible different levels of recreational development and use are with existing recreational uses, wildlife habitat, and agricultural uses.

LOMA/VIMY RIDGE WATERSHED

MAP 1



No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by BLM.

Upper Missouri River Breaks National Monument

Chapter II. ALTERNATIVES

The Bureau of Land Management (BLM), with input from the public and recommendations provided by the Loma/Vimy Ridge Working Group (**Appendix A**), developed the proposed alternative for Loma/Vimy Ridge that address the issues described in Chapter I.

A. ALTERNATIVES CONSIDERED BUT DROPPED FROM FURTHER ANALYSIS

Alternative sites for relocation of the current boat launching ramp and campground were considered and dropped at this time due to costs, river access or engineering problems. The sites considered would be located at the Loma Bridge and at the mouth of the Marias River. These sites were suggested during the public meetings.

An alternative for construction of a parking area and a scenic overlook on top of Rowe Bench was considered and dropped from further analysis. This would require some new surface disturbance, culvert, gravel, vehicle barriers, and an interpretive sign. This project would be located within the Upper Missouri River Breaks National Monument and is not consistent with interim management where road improvements should be minimal and designed solely to correct those conditions that are unsafe or hazardous. This project could be considered during development of the Monument RMP.

B. MANAGEMENT COMMON TO ALL ALTERNATIVES

The following resources would be managed as per the West Hiline RMP: Cultural Resources; Noxious Weeds; Soil, Water, and Air; Wildfire; Public Safety; Mineral Materials; and Oil and Gas Leasing.

Management of public lands within the Upper Missouri River Breaks National Monument will be consistent with the Montana State Directors' Interim Guidance for managing the Upper Missouri River Breaks National Monument (BLM 2001a).

C. ALTERNATIVE 1 - Current management

This alternative would continue current implementation of the West Hiline RMP, the Wood River Ranch HMP, the Upper Missouri National Wild and Scenic River Plan, the Standards for Rangeland Health and Guidelines for Livestock Grazing Management EIS, and the Montana State Directors' Interim Guidance for managing the Upper Missouri River Breaks National Monument (BLM 2001a).

1. Recreation

Management for and level of recreational development would not change except to meet public

safety needs, as provided for under the West Hiline RMP and Upper Missouri National Wild and Scenic River Plan.

2. Off-Highway Vehicles(OHV)

A travel plan would not be developed. The off-road vehicle use would not change under this alternative except as prescribed by the Montana State Directors' Interim Guidance for managing the Upper Missouri River Breaks National Monument (BLM 2001a). In addition, all BLM lands would be placed in a "Limited Use" category when the OHV EIS and Plan Amendment is approved (BLM2001b).

3. Access

The BLM would not pursue public access. Access on Viny Ridge would continue at the discretion of the private landowners.

4. Wildlife

Wildlife habitat improvements would continue as planned under the Wood River Ranch HMP. These actions include water developments, vegetation manipulations to benefit wildlife (seeding, planting, mowing, burning and grazing), and nesting structures. As per National Monument Interim Guidance, vegetation manipulations that cause substantial surface disturbance on public lands within the Upper Missouri River Breaks National Monument would not be permitted. While this appears contradictory, the values, appearances, and uses will be the same as before the designation. Actions are such that the values which make this an important wildlife management area and public hunting destination will continue as before.

Management and improvement of wildlife habitat in the Viny Ridge area would receive no emphasis beyond that allowed in previous planning documents and to meet standards of rangeland health.

5. Livestock Grazing Management

Grazing would be re-authorized upon expiration of current permits. Grazing allotments would be required to meet standards of rangeland health, and would be subject to changes in management based on needs determined through inventory and monitoring.

6. Farming

Farming would continue on the 600 acres of public land currently under cultivation (Map 2) as planned under the Wood River Ranch HMP. Agricultural agreements to manage for wildlife forage or cover will be continued with willing conservation groups.

D. ALTERNATIVE 2 - Proposed Action

This alternative would maintain healthy rangelands, riparian vegetation, provide high quality wildlife habitat, and provide high quality recreational opportunities.

1. Recreation

This alternative would provide recreational opportunities and infrastructure to safely meet existing needs, while minimizing disturbance to riparian vegetation, wildlife habitat, noxious weeds, and the values which make this area important and unique.

Undeveloped use areas would remain open to public use for all dispersed recreation uses which do not permanently degrade or damage the public lands and natural resources. These uses include but are not limited to hunting, fishing, hiking, picnicking, dispersed camping, and wildlife viewing.

The boat launching ramp would be maintained at the current location. The vehicle parking area would be maintained with gravel or allowed to vegetate to grass. The parking area would have a new pole or post and pole fence with walk throughs to replace the existing fence, at same location, and protect riparian resources from vehicle traffic. Two to three cooking-warming units will be provided in the future. The cooking warming units or any other recreational upgrades will be analyzed with site specific NEPA, for direct impacts to wildlife, riparian vegetation, noxious weeds, and other resources. The vault toilet would be maintained at the current location.

The existing access road to the boat ramp would be upgraded as determined by BLM road safety standards. Turnouts may be provided to facilitate two way travel. This improvement would upgrade and partially reroute the road, and provide all weather access to an existing BLM boat launching ramp, parking and camping area. This road route will be determined by a future route analysis. A site specific EA will be completed using this route, the required size specifications and detailing specific impacts from this upgrade.

The road to the Marias River fishing access site would be upgraded to an all weather gravel to size determined by BLM road safety standards, turnouts may be provided to facilitate two way travel. This improvement would upgrade an existing road and provide all weather access to a major public fishing access site at the mouth of the Marias River. A site specific EA will be completed using this route, the required size specifications and detailing specific impacts from this upgrade.

The cultural resources throughout the area would provide opportunities for interpretation and public education. The current developments at Decision Point include a self-guided walking path with interpretive signs for visitor information. This site would be upgraded to include better gravel, resting benches along the trail or at stops, picnic tables, an information kiosk for the Lewis & Clark National Historic Trail, and shelters at the parking area. These improvements would provide visitor safety and resource protection for public visitors to the site.

Signs would be placed directing people from the highway to developed sites or points of interest; Decision Point, Lewis & Clark National Historic Trail, Upper Missouri River Breaks National Monument, boat launch, fishing access, and the Richard E. Wood Watchable Wildlife Area.

2. Off-Highway Vehicles(OHV)

Off-road vehicle use would be limited year long to designated roads and trails. Travel by motorized vehicles would be restricted to designated routes yearlong, shown on Map 3. No new road closures are proposed in this plan in addition to the emergency closures which have been in effect for 10 years. Unless specifically prohibited, off-road travel for administration of a federal lease or permit would be allowed.

The BLM OHV EIS and Plan Amendment (BLM 2001b), when final will change all BLM land within the watershed from an Open status to a Limited status. Map 3 shows current designations for BLM land which would be changed by the OHV EIS.

Signs would be placed to direct the public to established routes. Parking areas would be located on Vimy Ridge to provide hunters with walk-in access to large public land tracts.

Resource damage, changes in landscape and user conflicts would be considered in opening or closing roads and trails in the future. As additional mapping and signing occurs, the roads and trails designated as open or restricted may change depending on future management needs.

3. Access

The BLM would strive to improve access to public lands on Vimy Ridge through easements and cooperative management with private landowners. When possible, the BLM would acquire, through willing sellers, or exchange for permanent legal access along the Missouri River and lands contiguous with the Loma/Vimy Ridge public lands.

4. Wildlife

Same as Alternative 1.

5. Livestock Grazing Management

Under this alternative, Standards of Rangeland Health would continue to be achieved (**Appendix C**) and guidelines would be met through a variety of grazing management techniques. There may be other standards as we go forward. **Appendix B** summarizes the current licensed use, public land acres, type of authorization, number of animal unit months allocated to livestock, and season of use for each allotment. Ten year permits would be issued on all allotments except for the Wood River Ranch, #6431. This allotment is not currently authorized for grazing and would only be done so in the future to meet the needs of the vegetation and to improve wildlife habitat.

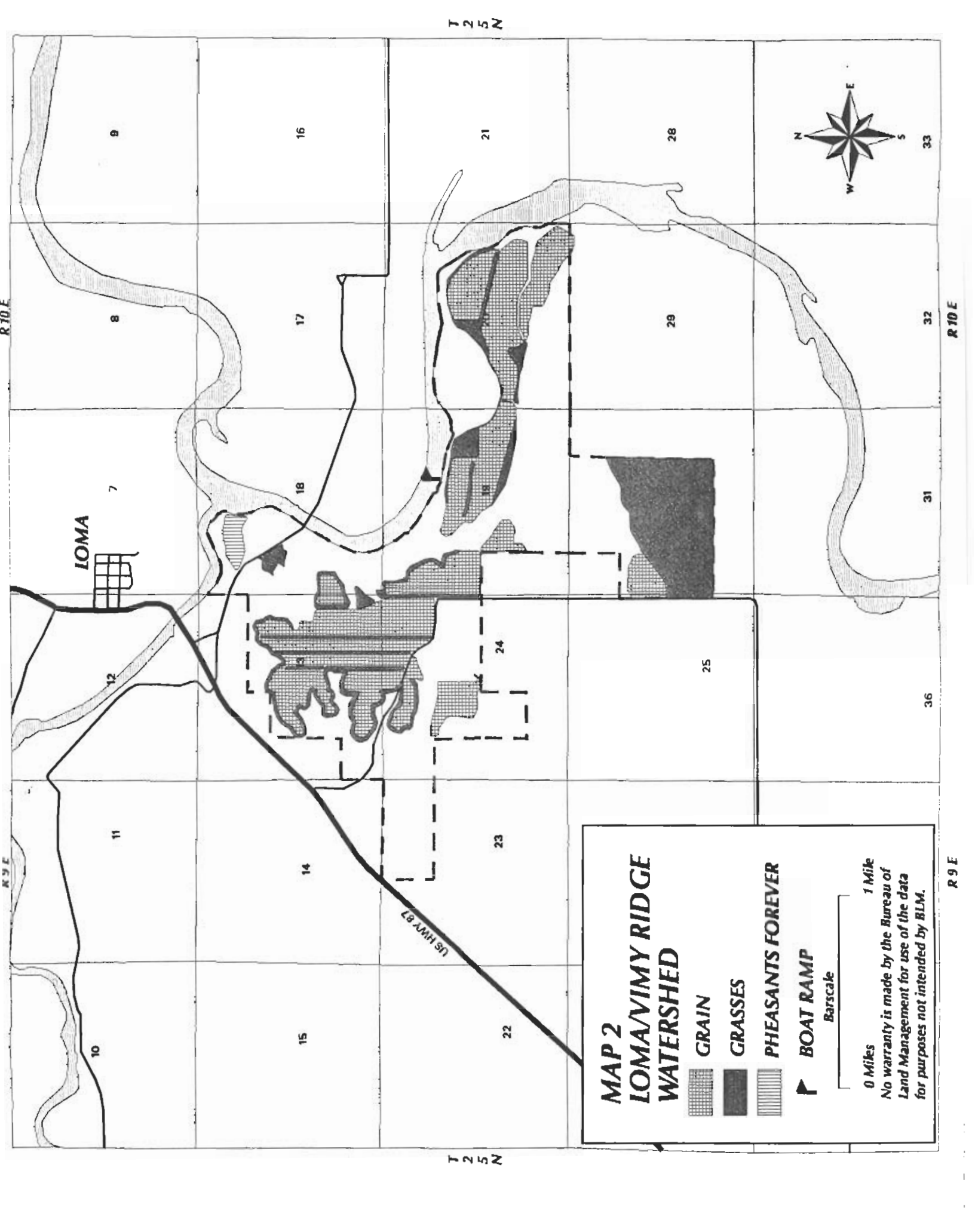
Same as Alternative 1.

F. ALTERNATIVE 3 -No Action

All actions would be the same as Alternative Two except for removal of grazing upon the expiration of existing permits.

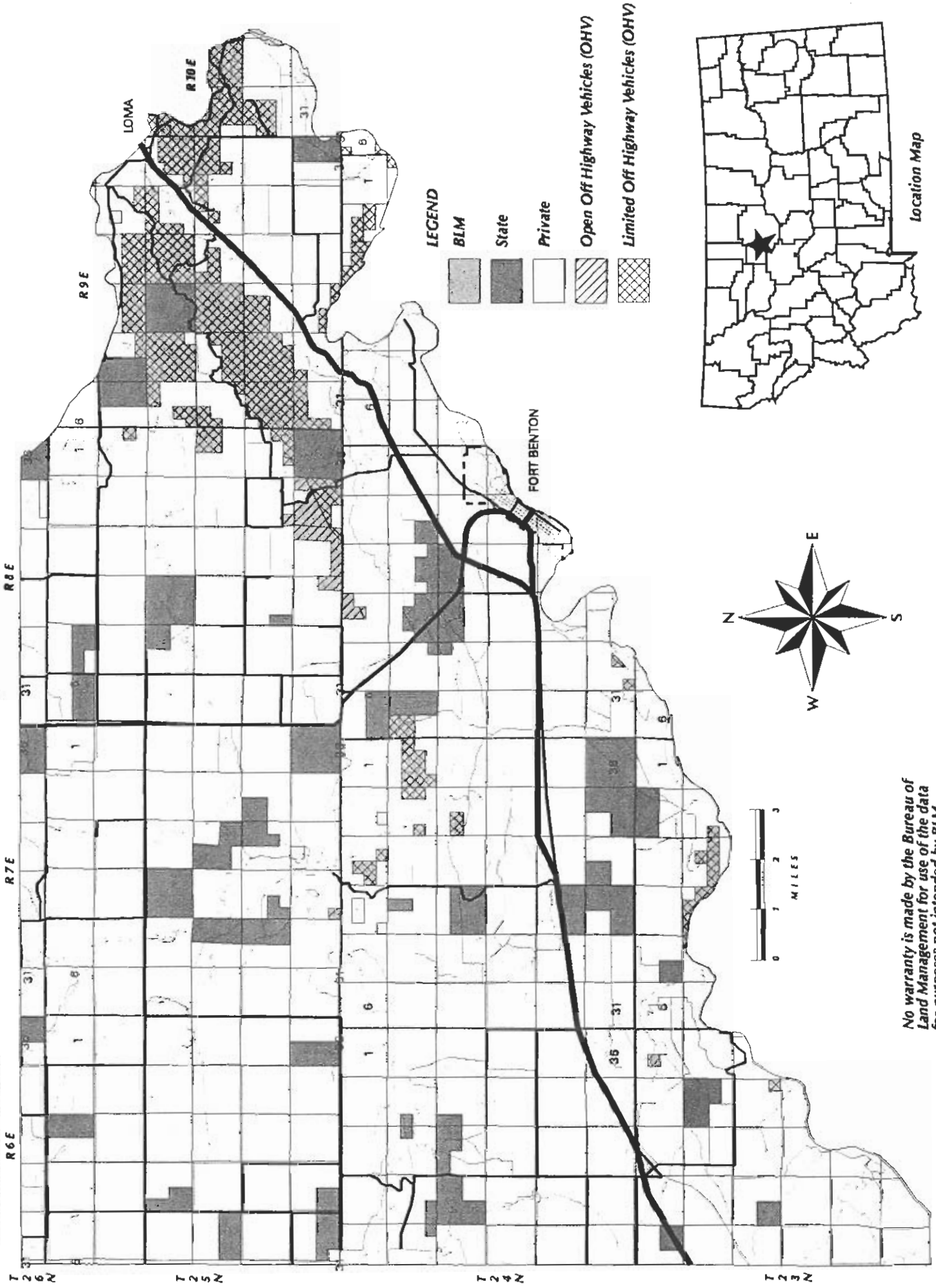
1. Livestock Grazing Management

Grazing would be allowed to continue on allotments meeting standards of rangeland health until expiration of existing permits. Upon expiration these permits would not be reissued.



LOMA/VIMY RIDGE WATERSHED

MAP 3



No warranty is made by the Bureau of Land Management for use of the data for purposes not intended by BLM.

Map #4 - Grazing allotments and noxious weeds

Chapter III. AFFECTED ENVIRONMENT

GENERAL DESCRIPTION

This chapter describes relevant natural resources and economic and social conditions found in the watershed area. The following critical elements of the human environment are not affected and will not be addressed further in this document; Air quality, ACECs, Environmental Justice, Prime or Unique Farm Lands, Native American Religious Concerns, Hazardous Wastes, Water Quality, and Wilderness.

1. Recreation

Events of local, regional and national significance occurred in the area, not necessarily on public lands. These events include the campsite where Lewis and Clark spent several days deciding which river was the main channel of the Missouri and the location of the first fur trading post on the Missouri above Fort Union. An Indian attack here in 1865 stopped development of a town planned to compete with Fort Benton as the head of steamboat navigation on the Missouri. Buildings, structures of other kinds, trails, roads and railroad beds attest to the rich local history.

The Vimy Ridge Watershed area is covered by two Recreation Management Areas (RMA) which were designated in the West HiLine RMP. These two units are the Havre RMA (MT06626) and the Upper Missouri National Wild and Scenic River RMA (MT06002). The boundary between them is US Highway 87.

The Havre RMA is a 282,000 acre segment of public land that is minimally managed for dispersed recreation use. An estimated 3% of the total Havre RMA is located in this watershed which consists of 8,798 acres (77%). An estimated 500 visits occur annually with primary recreation activity being hunting. There are no designated recreation sites in this portion of the unit.

The remaining 2,655 (23%) of BLM land in this watershed is managed under the Upper Missouri National Wild & Scenic River (UMNWSR) RMA.

All BLM lands contiguous with the Missouri River up to Fort Benton have been designated as part of the Upper Missouri River Breaks National Monument, and will be managed under Montana State Directors' Interim Guidance for managing the Upper Missouri River Breaks National Monument (BLM 2001a) until a Resource Management Plan(RMP) can be written for the entire monument.

The contiguous lands between U.S. Highway 87 and the Missouri River, known as the Wood River Ranch, have been designated as the Richard E. Wood Watchable Wildlife Area and as a national Sikes Act Management Area. The land contiguous to the UMNWSR known as the Wood River Ranch has been included into the River corridor for management purposes, although river based activities utilize a narrow area adjacent to the river. This segment of the river is

designated as "Recreational". The Lewis & Clark National Historical Trail route parallels this river corridor.

According to data collected by BLM recreation staff, there are approximately 1223 user days tied to river recreation between May 15 and September 15. The river receives additional use by hunters and fisherman before and after these dates. The Decision Point interpretive site had an estimated 3000 visits during the 1999 season. While recreation use occurs throughout the year on public lands in this area, minimal funding and recreational staff shortages prevent year round data collection or documentation of day to day visits to these sites.

While information on recreational use other than river related recreation is limited, hunting and fishing seem to be the most common with trapping, camping, picnicking, sightseeing and wildlife watching all becoming more popular. Other uses that have been observed include jogging, hiking, mountain biking, cross country skiing, and snowmobiling.

The Montana Department of Fish, Wildlife & Parks (MDFWP) estimated there were 6167 hunter days for deer hunters within Hunting District 400, which encompasses this watershed. Not all deer hunters used the public lands within this watershed, but these lands are used by as many hunters as the rest of the district (pers. communication MDFWP conservation officer). By far the greatest number of untracked user days come from bird hunters and fisherman, with a small amount of predator shooting and trapping.

2. Off Highway Vehicles

The northwest portion of Vimy Ridge (853 acres or 7.5%) is "OPEN" for OHV use yearlong. There are no restrictions as to type of vehicle or where they may travel on public land in this portion of the watershed during anytime of the year (Map #3).

The other 10,600 acres (92.5%) in this watershed unit is "LIMITED" for OHV use, either seasonally or yearlong (Map #3). Within this area, OHV use on the 2,249 acre Wood Watchable Wildlife area is restricted to designated routes all yearlong under an emergency restriction, which accounts for 19.5% of the total watershed. Within the "Limited" area, 73% (8,351 acres) has seasonal OHV use restrictions in place to protect wildlife values. Under this seasonal limited designation, unrestricted OHV use can take place on this segment of the watershed during the months of October and November which essentially coincides with hunting activities (Map #3).

From October through November during hunting season unrestricted OHV use is permissible on 9,204 acres (80%) of the watershed unit (853 ac "Open" + 8,351 ac "Limited seasonally").

3. Cultural Resources

Located near the Marias River-Missouri confluence, this area has a rich history, beginning with

the Lewis and Clark Expedition. The Corps of Discovery spent several days here (June 2, 1805) deciding which river was the main channel of the Missouri River. Captain Lewis and his crew passed through this area again in July 1806 on their return trip to rejoin Captain Clark at the junction of the Yellowstone and Missouri Rivers, near present day Sidney, Montana. A few decades later, the American Fur Company established its first trading posts above Fort Union here and the area was later involved with steamboat traffic on the upper Missouri. Historical sites within the watershed include Fort Piegan, Ophir town site and possible graves of massacre.

Historic buildings, structures of other kinds, irrigation ditches, trails, wagon roads, and railroad beds attest to the rich history surrounding settlement of the area.

While fewer than 300 acres of public land in the watershed area have been inventoried for cultural resources, the watershed area probably contains a number of prehistoric sites. These sites are likely to include tipi rings and other evidence of Native American residence such as bison kills.

4. Access

Current access is limited on the Viny Ridge and isolated tract portions of the watershed, and is primarily across private and state lands. Access to the lands known as the Wood River Ranch are excellent from US Highway 87 and county roads.

BLM rights-of-way (R/W) are issued for various utility and transportation purposes, communication sites, oil and gas facilities and pipelines and water related facilities such as reservoirs, dams, ditches, canals, dikes, wells and water pipelines. There are currently five permits issued for power transmission lines (overhead and buried), three permits for buried telephone cable, and a permit for a water pipeline on public lands within the Loma/Viny watershed.

5. Wildlife

The habitat within the Loma/Viny watershed planning area is important for many types of area wildlife, but of limited importance to sensitive and T&E species. Bald eagles winter in this area and can be seen during the worst of winters at the mouth of the Marias River, Black Bluff Rapids (Wood Bottom) and the Evans Bend Areas. There are no known bald eagle nests within the planning area, but across the Missouri River from a portion of this watershed there is a known Bald eagle nest. This location is not made known to the general public in order to protect this nest site. Peregrine falcon migrate through the area during spring and fall, but no known nesting occurs. This area may contribute to Missouri river species including pallid sturgeon and paddlefish, but very little is known of their habitat needs and how upland activities may affect them. No intensive inventories have been done for wildlife populations within the area.

Wildlife in the area is typical of that on shortgrass prairies of north central Montana, the Missouri River and associated breaks or coulees. Both areas have valuable habitat for big game, raptors,

game birds, a wide variety of neotropical songbirds, non-game species and fur bearers. It contains crucial habitat for these species and numbers are good to excellent because of the healthy riparian communities and upland habitat diversity. The riparian habitat along the river is important breeding and migration habitat for many species of neotropical birds and several raptor species. The river bluffs and cottonwood trees provide nesting habitat for Canada geese and the river is important for a variety of waterfowl especially during migrations and during freeze up of other water bodies.

Healthy riparian areas are crucially important to many resident and migratory birds. These riparian areas are used for nesting, feeding, escape cover, as travel corridors, and resting or roosting areas. Neotropical birds breed or migrate through Montana and spend their winter elsewhere, usually in Mexico or South America. Recent evidence suggests that populations of many of these **species are declining**. There are 143 species of neotropical migratory birds in Montana. Approximately ninety of these species breed or migrate through the watershed area (Skaar, 1992).

Viny Ridge, the coulees and river bottoms of Rowe Bench provide important year round habitat for mule and white-tailed deer. There is a limited amount of pronghorn habitat, but they are seen on Viny Ridge and have been seen on Rowe Bench. Game birds in the area include sharptail and sage grouse, Hungarian partridge, pheasant and mourning dove. Their numbers fluctuate annually depending on environmental conditions. Sage grouse appear to be declining locally, but no comprehensive monitoring has been done.

A **complete listing of wildlife and fisheries species** is available from the Havre Field Station.

6. Livestock Grazing Management

Initial **vegetation allocations** for the Loma/Viny Ridge **area were established following completion** of the Prairie Potholes EIS in 1982. This allocation set aside about 50% of the vegetation for **livestock** and 50% for wildlife, watershed protection, plant maintenance and other non-consumptive uses. These target levels were made with adjustments to occur following monitoring.

Grazing in the Loma/Viny Ridge area occurs under three kinds of authorizations (See **Appendix B**). Of the 24 allotments, four are small tracts which are not currently authorized for grazing but may or may not receive periodic use by neighboring livestock. Fifteen allotments are authorized under season and terms of use recognizing carrying capacity, four are authorizations with terms and conditions and one is under an Habitat Management Plan (HMP). Grazing leases are normally issued for 10-year terms.

Small, isolated tracts of public land have been authorized for grazing use by licensing for the recognized carrying capacity with terms and season of use. This type of authorization applies to allotments #6417, #6418, #6419, #6422, #6432, #6433, #6440, #6475, #6477, #6478, #6479, #6482, #6483, 16407, #16408.

Authorizations with terms and conditions specify the kind and number of livestock, grazing periods and amount of use (animal unit months) allowed on the allotment. This situation applies to allotments #6434, #6439, #6490 and #16350.

The Wood River Ranch #6431, on Rowe Bench, is not currently authorized for grazing and would only be done so in the future to meet the needs of the vegetation and to improve wildlife habitat. Authorizations incorporating a management plan allow the BLM and grazing lessee to cooperatively design a grazing program to meet the resource goals established for the area. Allotment #6431 has been under this type of management since 1993.

7. Farming

About 600 acres of public land is permitted for small grain crop production under two exchange of use MOUs (Wood River Ranch HMP). Winter and spring wheat are rotated in a crop-fallow sequence. Mechanical tillage and chemicals are used to control weeds and conserve soil moisture during fallow years. After harvest, the stubble stands through the winter to catch and hold snow. The NRCS provides planting recommendations needed in determining cropping sequences, recropping, residue requirements and other conservation practices. About 20 acres are farmed for wildlife cover and food, and can be planted to a variety of crop including small grains, corn, safflower, sunflower, and others upon BLM review.

About 260 acres of public land have been seeded to tame pasture, primarily crested wheatgrass. An additional 100 acres have been seeded with wildlife cover including western wheatgrass, green needlegrass, orchardgrass, tall & pubescent wheatgrass, indian ricegrass, yellow sweet clover, and black medic. See **Map #3** for farm and seeding areas.

8. Upper Missouri River Breaks National Monument

Approximately 2,655 acres of the watershed is within the Upper Missouri River Breaks National Monument. These public lands are located along and include lands contiguous with the Upper Missouri National Wild & Scenic River (**Map 1**).

Management of public lands within the Upper Missouri River Breaks National Monument will be consistent with the Montana State Directors' Interim Guidance for managing the Upper Missouri River Breaks National Monument (BLM 2001a), and will utilize existing planning documents for the area.

9. Soils, Water, and Air

The topography of the Loma/Vimy Ridge area is Missouri Breaks type badlands, with relatively flat terraces along the flood plain to many steep coulees dissecting relatively flat topped benches. The elevations vary between 2,540 to 2,800 feet from the Missouri River to Rowe Bench and 2,550 to 3100 feet from Marias River to Vimy Ridge.

Soil fertility and erodibility vary widely, depending primarily on the percentage of sand in the loams. Slopes vary from 0 to 70%. All soils in the Loma/Viny Ridge area are classified as highly erodible lands.

Detailed soil surveys are available through the NRCS, formerly the Soil Conservation Service, for Chouteau county. Although unpublished, field offices have the capability to provide specific information, such as physical and chemical characteristics and productivity, for the various soil types found in the Loma/Viny Ridge area.

Soils on the upper elevations of Viny ridge are Megonot and Yawdim. They are both formed on silty sedimentary uplands. Megonot is silty clay loam to a depth of about 12 inches, silty clay to 29 inches and semiconsolidated shale to a depth of 60 inches. Yawdim soils are silty clay to a depth of 15 inches and shale to a depth of 60 inches. Soils in the lower elevations of these hills are Lambeth which is formed in weakly consolidated silty sedimentary beds. It is on uplands and is silt loam to a depth of 60 inches.

Soils on the uplands on the Wood property south of Loma, are Lambeth, Fortbenton, and Chinook. Fortbenton formed in Eolian material over glacial till. It is fine sandy loam to a depth of about 23 inches and silty clay loam to a depth of 60 inches. Chinook formed in eolian deposits and is a fine sandy loam to a depth of about 41 inches. It is loamy fine sand to a depth of 60 inches. Marvan and Yamacal soils are on alluvial fans adjacent to the flood plains. Marvan is a clay from 0 to 60 inches. Yamacal is a loam from 0 to 60 inches. Harlem, Havre, Glendive and Hanly and Rivra soils are on flood plains and stream terraces. Harlem is silty clay loam to a depth of about 46 inches and silt loam with thin layers of fine sandy loam and silty clay loam to a depth of 60 inches. Havre is loam from 0 to 8 inches, a loam with thin layers of fine sandy loam, silt loam and clay loam to a depth of 60 inches. Glendive is loam to a depth of about 10 inches, silt loam to about 16 inches and fine sandy loam with thin layers of loam, silt loam and loamy fine sand to a depth of 60 inches. Hanly is loamy fine sand and loamy sand from 0 to 14 inches, stratified fine sandy loam, loamy fine sand, and loamy sand with thin layers of loam and sand to a depth of 60 inches. Rivra soils are gravelly sandy loam from 0 to 8 inches, very gravelly loamy coarse sand to a depth of about 32 inches and extremely gravelly sand to depth of 60 inches.

Soils northwest of Loma are mainly Neldore, and Hillon. Neldore formed in clayey residuum derived from shale. It is clay from 0 to 18 inches and semiconsolidated shale below. Hillon formed in calcareous glacial till. It is loam from 0 to 16 inches, and clay loam to a depth of 60 inches.

The Missouri, Teton, and Marias Rivers are the principle watersheds influencing Loma/Viny Ridge. The delineation of this planning area is based on blocks of public lands, and is actually a very small portion of three larger watersheds where they all come together. The public land portion of Viny Ridge is the terminal portion of a long flat ridge extending to the west, with coulees draining into both the Teton and Marias Rivers. Rowe Bench is a flat topped bench with coulees draining it on three sides into the Missouri River and one side into the Teton River.

There are three small public reservoirs and one water well on Rowe Bench. The BLM has water rights on all of these waters.

The water quality of these reservoirs and the adjacent rivers varies with the amount of sediment runoff from highly erodible gumbo slopes on Rowe Bench and Vinny Ridge. The Teton, Marias, and Missouri watershed will be developing Total Maximum Daily Loads(TMDL) in the near future and will influence the management of BLM lands in this watershed. It is possible that these TMDL limits will affect management decisions in this area. However the immediate findings and decisions of this plan would not be affected.

10. Vegetation

Native vegetation in the Loma/Vinny Ridge area is typical of the plants and communities found in the northern Great Plains and the Missouri River Breaks. Native plant communities consist primarily of upland sagebrush grasslands and riparian-wetlands. These types have evolved under grazing use by large herbivores and are influenced by climate and topography of the area. Detailed descriptions of the environment and vegetation can be found in the West Hilene RMP/EIS(1988) and the Wood River Ranch HMP and vegetative management EA(1992).

Presently, 9,104 acres of public land in the Loma/Vinny Ridge area are leased for grazing by domestic livestock while 2,349 acres remain unallocated. Of this 2,349 unallocated acres, farming (small grain) is permitted on 600 acres, through an Exchange of Use MOU (Wood River Ranch HMP).

Loma/Vinny Ridge lies within an arid region, only receiving 10 to 12 inches of precipitation annually. Most of this falls during the months of April, May, June and July. Low precipitation coupled with high temperatures during the summer, long hours of sunshine and hot winds favor plant species that are well adapted to drier conditions and short growing seasons. For these reasons, the upland areas are dominated by low growing perennial grasses, forbs and shrubs.

On uplands, vegetation is dominated by blue grama, needleandthread, prairie junegrass, native bluegrass, western wheatgrass, green needlegrass, and silver and big sagebrush. The forb and shrub component of these plant communities makes up to 10 to 30% of the total. The relatively flat upland benches are dissected by steep coulees. Receiving additional moisture and lower evaporation, taller grass species such as green needlegrass and woody species such as silver sagebrush, western snowberry, Wood's rose, chokecherry, current sp., and buffaloberry can be found in these coulees.

Initially, range condition of the public lands was inventoried in 1979 during development of the *Prairie Potholes Environmental Impact Statement*. The public lands within the Wood River Ranch HMP which were acquired in 1990 were not inventoried during the 1979 EIS, but these lands are not currently authorized for grazing. Range site types and conditions were determined and recorded, and riparian communities were identified, livestock carrying capacities were calculated

and range improvements were mapped. **Appendix C**, summarizes the ecological status on public land as of the 1998-99 assessment for Standards of Rangeland Health.

The 5.1 miles of riparian communities, mostly located along the Missouri, Marias, and Teton rivers, are dominated by many herbaceous and woody species depending on the successional level reached at that site. Of these 3 miles are healthy and functioning, 1.9 miles are functioning at risk (weeds), and .2 mile is not functioning (weeds, recreation). Green ash, currant, red osier dogwood, and chokecherry communities are present along the Missouri River and represent the Potential Natural Community (PNC) and the highest successional level for these sites. Smaller riparian communities are present within the upland coulees and around springs. The PNC varies on these sites depending on salinity, soils, and amount of water present. These communities vary from inland salt grass herbaceous to chokecherry/buffaloberry.

There are no known threatened or endangered plant species present in the area. The Montana Natural Heritage Program has identified 383 plant species of concern in Montana, some of which might occur in the area, but detailed inventories have not been done.

A complete plant species list is available from the Havre Field Station.

11. Noxious weeds

There are significant noxious weed infestations in the area (See **Map #4**), including spotted and russian knapweed, leafy spurge, perennial pepper weed, Canada thistle, and poison hemlock. Effective weed control on surrounding agricultural lands is limiting the spread in areas with farming. Other areas are being infested by weed seeds being carried in by recreational equipment and vehicles from infested areas, seeds being carried in by rivers and streams, wildlife species, and wind.

See **Appendix D** for a listing of known noxious weeds within the management area.

12. Economic and Social

Public lands within the Loma/Vimy watershed are both **grazed** and farmed. There is also some hunting, camping, wildlife viewing, fishing, and river based recreation. The focus of this analysis will be on recreation and livestock grazing since those are the two activities for which there could be economic impacts under one or more alternatives.

The BLM administers grazing on 9,284 acres, divided into 24 allotments (**Appendix B**), with a total of 1,722 AUMs. These allotments are leased by 19 ranchers using cow/calf operations. Four allotments, with a total of 165 AUMs, are currently unallocated, so total authorized use is 1,557 AUMs (1,722 - 165). Using the economic impact analysis in the BLM Rangeland Standards and Guidelines EIS, 1,557 AUMs could contribute \$43,800 in total income and 2 jobs to the region's

economy, after accounting for the multiplier effect of ranch spending (BLM, 1996). Grazing fee receipts generated by 1,557 AUMs would total about \$2,100 annually, assuming a \$1.35/AUM grazing fee.

There are approximately 600 acres farmed under an MOU with a local farmer, primarily for spring or winter wheat. This farming and exchange of use are done primarily to benefit game birds and no money changes hands. The farmer benefits financially some years, as does the county tax base. No changes in management of farming activity under the MOU are proposed in this EA.

Recreation data shows about 1,223 user days tied to river recreation from May through September. Montana FWP estimates about 6,167 hunter days in Hunting District 400 which includes this watershed, about ½ (3,084 hunter days) of which would be attributable to BLM lands in the watershed (pers. communication MFWP conservation officer). This level of activity would generate an estimated \$57,600 in local spending in the area. (This analysis assumes most recreational use is by local residents, and per-unit spending values of \$10.70/user-day for general recreation use and \$14.44/hunter day, numbers provided by MFWP).

During meetings with lessees and other members of the public, concerns were voiced that changes in land use on Vimy Ridge and Wood Bottom, would affect the local way of life. Some residents interpret proposals for changes in land use as the government trying to bring in tourists at the expense of those residents and non-residents who have used this area for years as it currently is. They feel that, before any drastic changes are made to permanently affect the lands and the types of use and public, the local community should have input in management of the area. The type of recreation the BLM encourages or manages for, dictates the types of users in the area and impacts to the local communities.

Chapter IV. ENVIRONMENTAL CONSEQUENCES

This chapter is the scientific and analytic basis for the comparison of the alternatives outlined in Chapter II. The potential environmental impacts of each alternative are described.

A. EFFECTS UNDER ALTERNATIVE 1 (Current Management)

1. Recreation

Recreation opportunities will continue, with dispersed recreation activities dominating, and river based use increasing due to the anniversary of the Lewis & Clark expedition in 2005 & 2006.

Access to public lands on Vimy Ridge will continue to be an issue for public users, relying on willing private landowners.

Access to the Marias River Fishing Access site, the Wood Bottom boat launch, parking and campground, would continue to be reliant on fair weather and regular road maintenance. There will continue to be a safety concern with 150 feet of boat launch access road, as the river continues to erode the bank.

2. Off Highway Vehicles(OHV)

The off road vehicle use on all areas would continue as currently managed, consistent with Montana State Directors' Interim Guidance for managing the Upper Missouri River Breaks National Monument (BLM 2001a), within monument lands. This would allow for additional resource damage to occur on Vimy Ridge and would risk increasing the spread of noxious weeds, and the danger of wildfire.

3. Cultural

Continued off road travel on Vimy Ridge will put cultural sites at risk of degradation through tracking and erosion caused by vehicle damage.

4. Access

Access would not be improved and the public lands on Vimy Ridge would only be accessible through private lands. Problems will continue to occur with the public being trespassed for trying to access this large block of public lands through private lands.

5. Wildlife

On Vimy Ridge, off road traffic could continue contributing to the spread of noxious weeds, reducing native vegetation. This traffic will damage vegetation used for food and cover, and will disturb resident wildlife.

This alternative will have no effect on any species of concern or species protected under the Endangered Species Act, or crucial habitat. Bald eagles make winter use of this area and pallid

sturgeon inhabit the Missouri and Marias Rivers, but there are no known impacts to them through this action.

6. Livestock Grazing Management

There would be no change in current grazing practices or authorizations or impacts by this action. The Standards for Rangeland Health will continue to maintain or improve the health of the public lands.

7. Farming

Farming to provide for wildlife forage will continue as identified within the Wood River Ranch HMP, with additional farm lands being converted to perennial vegetation to best meet wildlife needs.

8. Upper Missouri River Breaks National Monument

The number of visitors is expected to increase with the monument designation and continue increasing through the anniversary of the Lewis & Clark expedition. This will place added pressure on visitor services and the public's users of the national monument lands and services. There would be no impacts on the conditions for which the National Monument was designated.

9. Soil, Water & Air

Continued off road travel on Vimy Ridge will increase the potential for erosion due to loss of vegetation. There will be no new or significant impacts to water quality or quantity.

Floodplains along the Missouri and Marias Rivers will be managed under the Interim Monument Guidelines and would not be adversely affected by this alternative.

10. Vegetation

This alternative will continue to allow degradation of vegetation due to off road vehicle travel on Vimy Ridge. This may result in mechanical destruction of herbaceous and woody vegetation.

Under this alternative riparian vegetation will continue to meet the Standards of Rangeland Health, where noxious weeds are not the problem.

11. Noxious Weeds

On Vimy Ridge, cross country traffic could continue contributing to the spread of noxious weeds.

12. Economic & Social

There would be no change to economic conditions in the area under continuation of current management.

B. EFFECTS UNDER ALTERNATIVE 2 (Preferred)

1. Recreation

Recreation opportunities for dispersed recreation activities will continue. River based recreation use will increase, with additional infrastructure to support the public's needs benefitting that portion of users.

Increased recreation use may increase the spread of noxious weeds and allow for the introduction of new noxious weeds to the planning area.

2. Off Highway Vehicles(OHV)

OHV users will be slightly impacted as they are restricted to designated roads and trails. This impact is minimal and OHV users will benefit from better signing of public land boundaries and travel routes. Dispersed camping would be allowed within 100 feet of designated roads.

There may be an increased risk of wildfire from increased recreationist's use of the area, while OHV restrictions may limit risk in other areas.

3. Cultural

Cultural resources on the ground will be better protected under this alternative. Knowledge and public understanding of local resources will benefit through improved interpretation of cultural sites and events.

4. Access

Off-river recreationists will benefit from better access to and signing of public lands. Access to public lands on Vimy Ridge will be a priority for public users and the BLM. This alternative allows the BLM to pursue legal access through easements, and exchange or purchase from willing sellers.

Access to the Marias River Fishing Access site, the Wood Bottom boat launch, parking and campground, would improve with an upgraded all weather gravel road. There will continue to be a safety concern with 150 feet of boat launch access road, as the river continues to erode the bank

There will be slightly better response to wildfire with improved access and signing. Public safety will be improved by upgraded access and signing.

5. Wildlife

Wildlife in general are impacted by increased traffic and recreational use, increased disturbed areas, and an increase in the spread of noxious weeds into native habitat. Mule and white-tailed deer will avoid areas of heavy recreational use at levels or densities they might have otherwise been present. This same impact will occur with song and game birds to varying degrees, depending on tolerance to disturbance. The spring, summer, and fall timing and increased yearly use will coincide with breeding, nesting or fawning, and brood or fawn rearing. Many species intolerant of human disturbance during these periods will vacate the area or portions of.

Depending on the route and size of road upgrade determined to be needed by BLM engineers and regulations, individual wildlife may be more impacted and population densities near heavy use areas and along busy travel routes will decrease as traffic increases.

Signing, road upgrade, and advertisement in preparation of the Lewis & Clark anniversary will bring increased recreational use to the Wood Bottom during nesting season. This will result in some areas being unsuitable for raptor nesting due to human presence and activity. The cottonwood grove adjacent to the boat ramp and parking area will lose its suitability for raptor nesting except for very tolerant raptor species such as great horned owl.

If improved access results in increased winter use, wintering bald eagles may be impacted by additional disturbance adjacent to open winter waters and cottonwood roosts they currently use. There are no known impacts to pallid sturgeon from the proposed activities in the riparian areas and uplands.

Partial mitigation can be achieved through thorough reclamation of all disturbed areas, limiting expansion of heavy use areas to acreage already disturbed, and avoiding creating new heavy use areas in important limited wildlife habitat such as riparian areas. Any future road route to the boat ramp should remain on high ground tame grass seedings above the dense riparian community, and should disturb as little woody riparian vegetation as possible when crossing the old oxbow, to avoid additional impacts to this important wildlife habitat.

6. Livestock Grazing Management

There will be no impact under this alternative. All permits would be reissued under existing regulations, based on meeting Standards of Rangeland Health.

7. Farming

Farming to provide for wildlife forage will continue as identified within the Wood River Ranch HMP, with additional farm lands being converted to perennial vegetation under existing regulations to best meet wildlife needs, as determined by the wildlife biologist.

8. Upper Missouri River Breaks National Monument

The number of visitors is expected to increase with the monument designation and continue increasing through the anniversary of the Lewis & Clark expedition. This will place added pressure on visitor services and the public's users of the national monument lands and services. While there may be impacts to some resources, there will be no impacts to the conditions which were used to designate the National Monument.

Users of the river who make use of associated facilities will benefit from improved access routes, signing, camping infrastructure, and adjacent land recreational opportunities.

9. Soil, Water & Air

With upgrade of access roads, which will include widening and barrow ditches, there will be

additional disturbance and loss of vegetation. This will result in additional soil movement or loss in the short term. Proper reclamation will limit this loss. Any soil loss through erosion will increase sediment loads on the rivers. Due to the small scale of proposed disturbances and the size and high sediment loads of the rivers, this decrease in water quality will be negligible.

Due to additional signing and promotion, there will be increased vehicle and recreational use which may cause additional disturbance and loss of vegetation at roadsides and edge of parking areas. This may lead to a small site specific increase of soil erosion, but impacts to water will be negligible.

Limitation of OHV traffic to designated roads will reduce chance of future soil disturbance and erosion on Vimy Ridge.

Any increased development and disturbance on the Missouri River floodplain will alter the floodplain. This may cause impacts during high water events because of additional bare ground, shorter vegetation, and flow obstructing structures. Additional scour may occur adjacent to permanent structures and areas where vegetation has been removed or reduced in vigor or density. Any soil loss through erosion will increase sediment loads on the rivers. Due to the small scale of proposed disturbances and the size and high sediment loads of the rivers, this decrease in water quality will be negligible.

10. Vegetation

There will be localized impacts from this alternative on the vegetative communities, from road and facility upgrades and increased recreationist use. Road construction (widening, bar ditches and rerouting), and increased use of existing recreation sites will cause loss of herbaceous vegetation, consisting mainly of tame and native grass species, with some sedges and rushes. There will be a some loss of trees and shrubs. The exact amount of herbaceous and woody vegetation lost will be identified in a site specific EA after a route analysis and BLM engineering determine road design and route. There will be a greater chance of noxious weeds reestablishing in these disturbed areas, primarily leafy spurge, Russian knapweed, spotted knapweed, and Canada thistle. Proper site rehabilitation can reduce this potential impact.

Additional vegetation will be lost or will undergo species change through increases of traffic on edges of roads and parking areas. This would favor establishment of noxious weeds and some non-native grasses.

There will be localized impacts from this alternative on the riparian communities, from road and facility upgrades and increased recreationist use. There may be additional introduction of noxious weeds to riparian communities by recreationists, their equipment, and equipment used to upgrade or maintain developments. Thorough cleaning of all BLM equipment and vehicles to remove noxious weed seeds, and thorough reclamation of disturbed areas would partially reduce this threat.

11. Noxious Weeds

There may be impacts from noxious weeds as increased recreationists use of all the roads and lands increases the rate of spread and distribution of these species. Upgrades of roads will result in additional disturbance and bare soil, and will increase the potential for noxious weed establishment and spread. Proper site rehabilitation can reduce this potential impact. Restriction of OHV to designated roads on Vinny Ridge will reduce the opportunity to spread weeds from vehicles in this area.

12. Economic and Social Conditions

There would be no impact to livestock grazers. For recreation there would likely be an increase in economic activity through increased recreational opportunities, though future levels of activity have not been quantified.

C. EFFECTS UNDER ALTERNATIVE 3 - No Grazing

1. Recreation

Same as Alternative #2.

2. Off Highway Vehicles(OHV)

Same as Alternative #2.

3. Cultural

Same as Alternative #2.

4. Access

Access would be further restricted as BLM boundaries are fenced. Grazer will have little motivation to build gates and maintain road access to BLM lands if they restricted from them.

5. Wildlife

Wildlife and important wildlife habitat will benefit by removal of grazing, as grazing intolerant vegetation is allowed to grow without this impact. The construction of 83 miles of fence would impact wildlife movement and would cause some mortality, even if wildlife friendly BLM fencing stipulations are used. The rest of impacts will be same as Alternative 2.

The impacts to threatened species or species of concern is the same as Alternative 2.

6. Livestock Grazing Management

Grazing would only continue at current levels where allotments meet the Standards of Rangeland Health until the expiration of existing 10 year permits. This would likely eliminate potential for future grazing to improve habitat conditions within the planning area. There would be a loss of grazing fees to the federal government in the amount of \$2,325 annually.

There would likely be grazing trespasses to resolve where BLM lands are unfenced from private and where BLM lands divided private lands within the same pasture. Use supervision and trespass resolution will be ongoing until all private lands are fenced off from BLM lands.

7. Farming

Same as Alternative #1.

8. Upper Missouri River Breaks National Monument

Same as Alternative #2.

9. Soil, Water & Air

Removal of grazing will increase ground cover in some areas and improve riparian vegetation along riparian zones. This will remove prevent some erosion and limit some eroded soils from reaching the river systems. The effects of this will be beneficial to the soil stability and will reduce

the soil loading of these rivers a small amount, improving water quality.

10. Vegetation

Assuming no trespass and complete fencing off of BLM lands, the upland vegetation species which evolved under grazing pressures will decline in productivity and species diversity. The upland species which are grazing intolerant would benefit from removal of grazing. There would be a slight reduction in the spread of noxious weeds as impacts to native vegetation are reduced.

Riparian vegetation would benefit from removal of grazing.

Wildfire hazards will increase with increased public use and elimination of grazing activities, which might otherwise reduce vegetation buildup.

11. Noxious Weeds

Denser stands of native vegetation, as a result of removing grazing, is better able to compete with new noxious weed establishment. Additional disturbed areas associated with new construction and increased recreational traffic would have the same impacts as Alternative 2.

12. Economic & Social Conditions

Recreation opportunities would increase under this alternative and contribute to increased economic activity in the area, though future levels of activity have not been quantified.

For livestock grazing, there would be a reduction of 1,557 authorized AUMs (1,722 AUMs including the unallocated AUMs). This could cause a reduction of about \$43,800 in total income and 2 jobs to the region's economy, after accounting for the multiplier effect of ranch spending. The effect on individual livestock operators will vary depending on several factors: how soon their permits/leases expire, how many AUMs they will lose, what portion of their entire operation these BLM AUMs represent, and their ability to obtain alternative forage if necessary. For some operators the loss will be minor. For others, the adjustment could be more substantive.

Additionally, there would be costs to the operators due to the need to buy and build fence to keep livestock off of federal lands. In some cases this would require one mile of fence for 40 acre tracts. At an average of \$4,000/mile, the total costs of fencing off BLM lands from private and state land would be approximately \$331,000. In cases where BLM lands provide access between private grazing lands, new fences may isolate those lands from water or even pastures. This will require construction of additional livestock waters and possibly trucking livestock around BLM lands. The new fences may prevent grazing of some private rangelands and further loss of income.

BLM costs would increase dramatically in order to enforce compliance and process trespass cases. Annual costs would vary based on level of compliance and construction of private fences. Also, there would be a loss of about \$2,100 in grazing fee receipts, some of which would be in the form of lost revenue to the local area for spending on range improvements.

Chapter V. Consultation and Coordination

As a result of the public interest in the management of the Loma/Vimy Ridge area, public scoping meetings and briefings were held to identify the resource issues of concern that would be used in developing future management options. Working groups of interested parties assisted the BLM with answering concerns and working through various alternatives for management of these public lands. The working groups formed for this planning effort consisted of grazing and farming lessees, sportsman, conservation organizations, Bureau of Land Management, Chouteau County planners, and the Natural Resources Conservation Service. See **Appendix F** for complete list of public participants, their representation, and meeting dates.

BLM staff participation included;

- Havre Field Station

Mitch Forsyth	- Rangeland Management, Vegetation, Noxious Weeds
Ralph Page	- Rangeland Management
Lou Hagener	- Rangeland Management
Jody Peters	- Wildlife, Fisheries, T&E, Riparian
Lowell Hassler	- Lands, Realty
Owen Billingsley	- Assistant Field Manager

- Malta Field Office

Huey Long	- Soils
Jennie Jennings	- Hydrology

- Great Falls Field Station

Jerry Clark	- Cultural
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- Lewistown Field Office

Clark Whitehead	- Recreation
Jim Mitchell	- Minerals
Jerry Majerus	- NEPA
Carl Patten	- Engineering
Tom Madson	- Law Enforcement
Chuck Otto	- Assistant FO Manager for Renewable Resources
Vinita Shea	- Assistant FO Manager for Non-Renewable Resources(Acting)
Gary Slagel	- Interim National Monument Manager

- Montana State Office

Wendy Favinger	-Economics
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Bureau of Land Management, 1982. *Prairie Potholes Environmental Impact Statement*. Department of the Interior, Lewistown, Montana.

Bureau of Land Management, 1988. *West Hiline Resource Management Plan*. Department of the Interior, Lewistown, Montana.

Bureau of Land Management, 1993. *Wood River Ranch Habitat Management Plan*. Department of the Interior, Havre, Montana.

Bureau of Land Management, 1993. *Upper Missouri River National Wild & Scenic River Plan Update*.

Bureau of Land Management, 1996. *Standards for Rangeland Health and Guidelines for Livestock Grazing Management Environmental Impact Statement*. BLM, Montana State Office, Billings.

Bureau of Land Management, 2001a. *Montana State Directors' Interim Guidance for managing the Upper Missouri River Breaks National Monument*.

Bureau of Land Management, 2001b. *Final Off-Highway Vehicle Environmental Impact Statement and Proposed Plan Amendment*. Department of the Interior, Billings, Montana.

Hansen, Paul L., Robert D. Pfister, Keith Boggs, Bradley J. Cook, John Joy and Dan K. Hinckley, 1995. *Classification and Management of Montana's Riparian and Wetland Sites*. Montana Forest and Conservation Experiment Station, School of Forestry, University of Montana, Missoula, Montana.

National Academy Press, 1994. *Rangeland Health. New Methods to Classify, Inventory and Monitor Rangelands*.

National Park Service, 1987. *Lewis & Clark National Historic Trail Plan*

Society for Range Management, 1994. *Ecological Implications of Livestock Herbivory in the West*.

Appendix A - Meeting Dates and Working Group Recommendations

Meeting Dates and location:

Feb. 18,1998	Fort Benton
March 2, 1998	"
April 20, 1998	"
June 9,1998	Field Tour (Loma)
Nov. 5, 1998	Fort Benton
Nov. 17, 1998	"
Dec. 7,1998	"

The following summary was compiled from the different meetings for Vinny Ridge and Wood Property travel plan and recreation management working groups. The summary may contain some items which did not have complete consensus, but is a summary of what the BLM hopes was adequately addressed, and does not vary dramatically from what most of the working group was willing to go along with. These recommendations do not contain all the specific projects, road routes, allotment evaluations or proposed actions.

1. To maintain lands and resources and to provide habitat for wildlife and recreational opportunities associated with wildlife, while not diminishing existing opportunities and uses of wildlife habitat.

Develop additional wildlife habitat improvements providing additional cover, forage, and water. This can include but is not limited to seedings, plantings, water development, and prescribed fire. When possible these improvements will be made in cooperation with private conservation groups, permittees, adjacent landowners, and other government agencies.

Increase plant diversity in seeded areas(tame grass) with an emphasis on shrubs and forbs. This will improve vegetative diversity and the quality of the cover and forage for wildlife.

Minimize development in and disturbance to important wildlife habitat such as riparian areas and native upland shrub/grass community.

Avoid actions or permitting actions which may increase the spread of noxious weeds, erosion, or wild fire hazards.

Continue with an integrated weed control program for the Loma/Vinny Watershed area.

Review all management actions which may impact wildlife resources in accordance with BLM policy, the National Environmental Policy Act(NEPA) and the Endangered Species Act(ESA).

2. Recreation management will continue to provide opportunities for dispersed recreation activities.

Undeveloped use areas will remain open to public use for all dispersed recreation uses which do not permanently degrade or damage the public lands and natural resources. These uses include but are not limited to hunting, fishing, hiking, picnicking, dispersed camping, and wildlife viewing.

Off-highway vehicle use would be limited yearlong to designated roads and trails. Off-road travel for administration of a federal lease or permit would be granted, unless specifically prohibited. Camping would be permitted up to 100 feet from any established road, but limited to 14 days. When needed, roads will be signed to direct the public to established routes.

Improve public access to designated routes and improve signing on public land boundaries to reduce trespass problems on adjacent lands.

BLM will strive to improve limited public access to public lands on Vinny Ridge through easements and cooperative management with private landowners. When possible BLM will acquire permanent long term access by purchase or exchange of lands with access from willing sellers.

3. Develop recreational opportunities and infrastructure to safely meet existing needs, while minimizing disturbance to riparian vegetation, wildlife habitat, noxious weeds, and the values which make this area important and unique.

Provide boat launching ramp with all weather access and minimal site upgrade to provide for primitive camping sites with minimal amenities.

Place signs directing people from the highway to developed sites or points of interest.

Develop strategy for providing access to handicapped individuals to developed sites.

Provide minimally developed parking area/scenic overlook from top of Rowe Bench.

4. Provide for protection and interpretation of cultural resources in the Loma/Vinny Ridge Watershed.

The cultural resources throughout the area would provide opportunities for interpretation and public education. Developments include a self-guided walking path with interpretive signs for visitor information, and could be upgraded to include resting benches along the trail, picnic tables and shelters at the parking area.

Develop interpretive sites (informational and directional signing) for interesting local sites and

historic events(wagon roads, bootleg brewing sites, early irrigation efforts, homesteads).

Review all management actions which may impact cultural resources in accordance with the National Historic Preservation Act and ARPA and coordinate such activities with Montana State Historic Preservation Officer.

5. Maintain existing agricultural uses.

Existing farm leases on the Wood Bottom and Rowe Bench will be renewed subject to usual modifications. Exchange of use farm leases will be reviewed in 2005. The long term goal of the BLM management is to reduce the farmed acres with additional wildlife seedings while maintaining an adequate forage base for the large game bird population. This will require reaching a balance between high quality cover and forage provided by small grain farming and ensuring that the farming operation is economically viable for the private operator.

Agricultural agreements to manage for wildlife forage or cover will be continued with willing conservation groups.

Issue 10 year grazing leases to permittees whose allotments meet Standards and Guidelines or are making significant progress towards meeting them, to encourage their investment and involvement and to provide stability to their operation.

6. Provide support for continued BLM management of public lands at Loma/Vimy and assist in amending the BLM's West Hiline RMP for the area.

BLM will make isolated tracts of public land available for disposal through sale or exchange.

BLM will seek to consolidate federal access in the Vimy Ridge and Rowe Bench areas through purchase or exchange with willing sellers or acquisition of long term easements. Acquisitions from willing sellers through purchase or exchange may be pursued where lands are available which are valuable historically, for recreation purposes, or valuable wildlife habitat.

Continue to provide for mineral extraction in non-sensitive areas in accordance with BLM policy.

Appendix B - Grazing Authorizations

Allotment Number	Allotment Name	Type of Authorization	Acres	Public AUMs	Season of Use
6431	Wood River Ranch	* Habitat Mgmt. Plan	2,169		Non- use
6434	Cabin	**Terms & Conditions	1874	430	Summer/fall
6439	Homestead Coulee	**Terms & Conditions	1360	408	Summer
16350	South Vimy	**Terms & Conditions	920	53	Yearlong
6490	Fork Coulee	**Terms & Conditions	1096	166	Fall/winter
6417	Talfalger	***Season & Terms	40	5	Early summer
6418	Green Roof	***Season & Terms	435	81	Winter
6419	Kelly	***Season & Terms	160	44	Fall/winter
6422	N Hanging 5	***Season & Terms	459	52	Yearlong
6432	Arroyo	*** Season & Terms	553	139	Summer/fall
6433	Valkyrie	***Season & Terms	80	5	Yearlong
6440	Larigo	***Season & Terms	400	66	Summer/fall
6475	Vimy Point	***Season & Terms	160	22	Yearlong
6477	Dietz	***Season & Terms	286	30	Spring-fall
6479	Shamrock	***Season & Terms	40	14	Yearlong
6478	Teton	***Season & Terms	560	77	Summer/fall
6482	Badger	***Season & Terms	400	46	Winter
16407	Bootlegger	***Season & Terms	120	35	Yearlong
6483	Tunis	***Season & Terms	40	12	Yearlong
16408	Pinto	***Season & Terms	120	37	Summer/fall

Total 1722 AUMs Authorized

Acres are approximations made at time of allocation or earlier planning efforts and may vary from actual surveyed acreage.

Appendix B - Grazing Authorizations					
Allotment Number	Allotment Name	Type of Authorization	Acres	AUMs	Season of Use
6333	T24N, R8E, Sec. 32	****Unallocated	26		
6509	T24N, R7E, Sec. 14	****Unallocated	80		
	T25N, R10E, Sec. 28	****Unallocated (Island)	15		
6480	T23N, R6E, Sec. 14	****Unallocated	59		

* The Wood River Ranch #6431, on Rowe Bench, is not currently authorized for grazing and would only be done so in the future to meet the needs of the vegetation and to improve wildlife habitat. Authorizations incorporating a management plan allow the BLM and grazing lessee to cooperatively design a grazing program to meet the resource goals established for the area. Allotment #6431 has been under this type of management since 1993.

** Term & Conditions - Authorizations with terms and conditions specify the kind and number of livestock, grazing periods and amount of use (animal unit months) allowed on the allotment.

***Season & Terms of Use authorizations are issued on small, isolated tracts of public land. Grazing use is licensed for the recognized carrying capacity.

**** Unallocated allotments are small tracts which are not currently authorized for grazing but may or may not receive periodic use by neighboring livestock.

Appendix C - Summary of Standards of Rangeland Health Loma/Viny Watershed

Allotment	Standard 1 Uplands*	Standard 2 Riparian**	Standard 3 Water	Standard 4 Air	Standard 5 Diversity	Summary
Wood R. Ranch	*yes	yes,weeds	yes	yes	yes	yes
Cabin	yes	n/a	yes	yes	yes	yes
Homestead coulee	yes	n/a	yes	yes	yes	yes
South Viny & Fork Coulee	yes	n/a	yes	yes	yes	yes
Talfalger	yes	n/a	yes	yes	yes	yes
Green Roof	yes	n/a	yes	yes	yes	yes
Kelly	yes	n/a	yes	yes	yes	yes
N Hanging 5	no	yes,weeds	yes	yes	yes	mkg prgs
Arroyo	yes	n/a	yes	yes	yes	yes
Valkyrie	yes	n/a	yes	yes	yes	yes
Latigo	yes	yes	yes	yes	yes	yes
Viny Point	yes	no***	yes	yes	no***	mkg prgs
Dietz	mkg prgs	n/a	yes	yes	yes	yes
Shamrock	yes	yes,weeds	yes	yes	yes	yes
Teton	yes	n/a	yes	yes	yes	yes
Badger	yes	yes	yes	yes	yes	yes
Bootlegger	yes	yes	yes	yes	yes	yes
Tunis	yes	n/a	yes	yes	yes	yes
Pinto	yes	n/a	yes	yes	yes	yes
T25N, R10E,Sec18	yes	n/a	yes	yes	yes	yes
T24N, R8E, Sec32	yes	n/a	yes	yes	yes	yes
T24N, R7E, Sec14	yes	n/a	yes	yes	yes	yes
T25N, R10E,Sec28	yes	n/a	yes	yes	yes	yes
T23N, 6E,Sec14	yes	yes	yes	yes	yes	yes

* Most often Standards # 1 & 2 were being met in spite of presence of noxious weeds. If weeds continue to spread, it will be difficult to meet Standards # 1, 2,& 3 in the the long term.

** Wood River Ranch has approximately 960 acres which are farmed or have been put into tame grass. These acres would not meet the upland Standard, but contribute to the overall management which emphasizes managing these acquired lands for game bird food and cover and big game cover(Wood River Ranch HMP)

*** Not due to impacts of livestock grazing, or current level of use. Riparian had large weed infestation and upland vegetative health and vigor were good, but species diversity was poor and brought total score down. Likely due to heavy historic horse use and is not indicative of current use.

In none of these allotments was there any large scale problems due to grazing, in which the allotment as a whole was not meeting Standards of Rangeland Health. Where grazing related problems were found, it was small in scale within a pasture and impacts were not at a scale to affect an allotment.

Appendix D - Noxious Weeds

Noxious weeds which occur within the planning area. This list is not meant to be all inclusive of all species present.

Noxious Weeds:

cheatgrass(smooth brome)

salt cedar

leafy spurge

perennial pepperweed

poison hemlock

Russian knapweed

field bindweed

Russian thistle

spotted knapweed

LOMA/VIMY RIDGE MAILING LIST

Local government;

NRCS, Chouteau County
Montana Fish, Wildlife & Parks - Region 4
Chouteau County Weed Supervisor - Mr. Dale Hankins
Chouteau County Commissioners
Chouteau County Ext. Office - Judee Wargo, Agent
DNRC
Dept. of Environmental Quality - Ms. Carol Mackin

Interest groups;

Montana River Outfitters - Mr. Craig Madsen
Upper Missouri Breaks Audubon - Mr. George Engler
Medicine River Canoe Club - Mr. Jim McDermant
Montana Wildlife Federation - Mr. Jim McDermant
Great Falls Conservation Council, Mr. George Engler
Chouteau Co. Pheasants Forever - Mr. Bill Anderson
Montana Public Lands Council
Russell Country Sportsmen - Mr. Ron Litostansky
Teton River Watershed Group - Ms. Diane Walker
Walleyes Unlimited - Mr. Bob Bahr
Wildlife Management Institute
Capital Trail Vehicle Association
Montana Trail Vehicle Riders Association

Individual or commercial;

N Hanging 5 Ranch - Don & Myrna Lundy
Ms. Harriet Marble
Missouri River Outfitters - Mr. Larry Cook
Missouri River Canoe Company - Mr. Don Sorenson
Jim & Norma Wood
Charles & Phyllis Farrell
Mr. LaVern Wutschke
Mr. John Kelly
Lenington Farms Corp.
Mr. John Nelson
Kalanick Ranch
Mr. Stuart Elliott
Mr. Henry Nagamori
Mr. Paul Graham

Olson Farms, Inc.
Mr. John Olsen

Appendix E - Individual or commercial, continued

Mr. John Brumley
Rose River Inn- Gar and Vivian Wood
Mr. Con Kelly
Mr. James Cornell
Mr. Richard Anderson
Mr. Doug Ferguson
M&M Rivers Expeditions - Mr. Mike Nottingham
Mr. Mike Lundy
Mr. David Van Tighem
Mr. Monte Thompson
Mr. Ken Evans
Mr. Eddie Albers
Mr. Don Karcewski
Gilbert & Lynda Payne
Mr. Jim Cummings
Mr. Ron Young
Mr. Larry Eloff
Mr. Alan Rollo
Mr. Jay Ritland
Mr. Bill Albers
Mr. Henning Andreasen
Mr. Steve Funke